UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,489	10/16/2003	Stephen L. Tvedten	GET01/P303	9765

277 7590 08/13/2007

PRICE HENEVELD COOPER DEWITT & LITTON, LLP
695 KENMOOR, S.E.
P O BOX 2567
GRAND RAPIDS, MI 49501

EXAMINER	
MACAULEY, SHERIDAN R	
ART UNIT	**PAPER NUMBER**
1651	

MAIL DATE	DELIVERY MODE
08/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/687,489	TVEDTEN, STEPHEN L.	
	Examiner	Art Unit	
	Sheridan R. MacAuley	1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-80* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-80* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/16/2003, 05/07/2004*.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-80 are pending.

Election/Restrictions

1. Applicant's election with traverse of claims 1-11, 15-29, 39-49, 75, 77, 79 and 80 (the invention of Group I, as set forth in the office action mailed on March 27, 2006) in the reply filed on April 18, 2006 is acknowledged. The traversal is on the ground(s) that the examiner failed to show that the nonelected inventions (Groups II through VI) have separate utility, and that a search of all of the claims would not place a serious search burden on the examiner. This was found to be persuasive because the search of the elected subject matter resulted in a search of the subject matter of claims 1-80. Therefore, the restriction requirement has been withdrawn.

2. The office action mailed on March 27, 2006 included a species election requirement. Applicant failed to respond to this requirement in their response mailed on April 18, 2006. A communication notifying applicant of this error was mailed on April 12, 2007, to which applicant responded with an incomplete species election on May 10, 2007. However, during a telephone conversation with Steven Underwood (agent for applicant, Reg. No. 35727) on July 3, 2007 a provisional election was made without traverse as follows:

A. For th e species of attractants of claim 7, applicant elected phermones and their analogs.

B. For th e species of enzymes of claims 12-14, applicant elected chitinases.

C. For the species of nitrogen sources recited in claim 51, applicant elected urea.

D. For the species of plant extracts/oils recited in claim 61, applicant elected peppermint or other mint.

E. For th e species of compounds recited in claim 65, applicant elected growth regulators.

F. For the species of pesticides recited in claim 66, applicant elected linalool.

G. For the species of aluminum compounds recited in claim 60, applicant elected AlCl3.

H. For the species of plant extracts/oils recited in claim 76, applicant elected peppermint or other mint.

3. However, in view of the results of the search, the species election requirement has been withdrawn. Claims 1-80 are examined on the merits in this office action.

Affidavit or Declaration

4. Applicant refers to an affidavit or declaration filed in the prior application. Affidavits or declarations, such as those submitted under 37 CFR 1.130, 1.131, and 1.132, filed during the prosecution of the prior application do not automatically become

a part of this application. Where it is desired to rely on an earlier filed affidavit or declaration, the applicant should make the remarks of record in this application and include a copy of the original affidavit or declaration filed in the prior application.

Public Use and/or Sale

5. An issue of public use or on sale activity has been raised in this application. In order for the examiner to properly consider patentability of the claimed invention under 35 U.S.C. 102(b), additional information regarding this issue is required. Specifically, the protest filed October 21, 1999, suggests that the claimed invention may have been used publicly by applicant and by independent third parties. Thus, it is respectfully requested that applicant answer the following questions:

(a) Did applicant publicly use or sell or offer the claimed invention for sale before the filing of the instant application, and if so, was the public use or sale performed more than one year before the filing of the instant application?

(b) If applicant publicly used or sold or offered the claimed invention for sale prior to filing of the instant application, what were the specific circumstances of the use, sale or offer for sale?

(c) The protest filed October 21, 1999, contains what appears to be marketing literature for a product named "Kleen Kill" from a firm named Get Set, Inc. The literature clearly discloses the use of protease and other enzymes for killing pests. Applicant is required to answer several questions regarding this literature:

(1) Is applicant aware of the date of publication and/or sale of the Kleen Kill marketing literature, and if so what is that date?

(2) Did applicant use the Kleen Kill product to kill pests according to the methods indicated in the literature prior to filing of this patent application?

(3) If applicant is aware, what are the ingredients of the Kleen Kill product?

(4) Was the Kleen Kill product for sale, i.e. available commercially, more than one year prior to the filing of this patent application?

Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment.

Claim Objections

6. Claims 8-11 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 8-11 depend from claim 1, which recites a method wherein a composition comprising an enzyme component in no more than 1% by weight of the composition is used. However, claims 8-11 recite that the compositions may comprise an enzyme component as more than 1% by weight of the composition. The cited claims are therefore improper dependent

claims because they could conceivably be infringed by a method that does not also infringe the basic claim. See MPEP 608.01(n).

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 2 recites the limitation "detergent compound". There is insufficient antecedent basis for this limitation in the claim, which refers to claim 1, which recites "detergent component".

9. Claim 15 recites the limitation "said surfactant" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim., which refers to claim 1, which does not recite "surfactant". Claims 16-18 are rejected insofar as they depend from claim 15.

10. Claim 19 recites the limitation "said detergent builder" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim., which refers to claim 1, which does not recite "detergent builder".

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

12. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

13. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 1-80 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-77 of U.S. Patent No. 6,663,860. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application differ only from those of the patent in that they are drawn more broadly.

15. For instance, claim 1 of the instant application, the broadest claim, is drawn to a method for exterminating pests comprising the steps of providing a composition comprising an enzyme component, said enzyme component comprising at least one

protease in an amount no more than 1% by weight of the composition and a detergent component; and applying the composition to at least one pest.

16. In comparison, claim 1 of the patent, also the broadest claim, recites a method for exterminating pests comprising an enzyme component, said enzyme component comprising at least one protease, and a detergent component, said detergent component comprising a surfactant and a detergent builder; and applying said composition to a pest. Claim 8 recites a composition that comprises about 0.1% to about 10% by weight of the enzyme, and claim 9 recites that the composition comprises about 1% to about 5% by weight of said enzyme component.

17. Although the patent does not recite the limitation that the composition comprises no more than 1% by weight of the enzyme component in the broadest claim, from which all other claims depend, it recites the limitation in a dependent claim. One skilled in the art would therefore be motivated to use compositions comprising 1% or less by weight of the enzyme component in the further embodiments of the invention recited by the claims of the patent. One would have a reasonable expectation of success in using compositions comprising 1% or less by weight of the enzyme component with the invention claimed in the patent because the patent teaches that one can use compositions with the enzyme component in that range in the method of the invention. Regarding claims 3-80 of the instant application, claims 2-77 teach all limitations recited therein. Therefore, the claims of the instant application are rendered obvious in view of the claims of the patent.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

18. Claims 1, 3, 4, 8-19, 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Corbett (EP 0184288, cited in IDS). Claim 1 is drawn to a method for exterminating pests comprising the steps of providing a composition comprising an enzyme component, said enzyme component comprising at least one protease in an amount no more than 1% by weight of the composition and a detergent component; and applying the composition to at least one pest. The dependent claims recite methods of applying the composition, the use of a baiting substep, the concentration of the enzyme in the composition, and the specific enzyme components, surfactants and detergent builders that can be used in the method.

19. Corbett teaches a method of applying a composition comprising at least one enzyme to a pest, wherein the enzyme is present in the composition from 0.1 to 5% by weight (p. 5, lines 17-24, p. 11, example 2). Corbett teaches that the composition may comprise a surfactant, such as an anionic surfactant, including many of those recited in the claims (p. 5, lines 14-16, p. 7, line 9-p. 8, line 13). Corbett teaches that the composition may comprise a detergent builder (e.g. silicates; p. 6, lines 13-19). Corbett teaches that the method comprises applying the composition to a surface (spreading)

and allowing the pest to contact the surface (p. 11, example 2). Corbett teaches that the composition can comprise a hydrolase, a protease or a lipase (p. 3, lines 18-24). Corbett teaches that the composition can be an aqueous solution or suspension (p. 5, line 25-p. 6, line 25).

20. Therefore, Corbett anticipates all of the limitations of the cited claims.

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

22. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

23. Claims 1, 3, 4, 8-29, 39-49 and 75-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbett (EP 0184288, cited in IDS). Claim 1 is drawn to a method for exterminating pests comprising the steps of providing a composition

comprising an enzyme component, said enzyme component comprising at least one protease in an amount no more than 1% by weight of the composition and a detergent component; and applying the composition to at least one pest. The dependent claims recite methods of applying the composition, the use of a baiting substep, the concentration of the enzyme in the composition, the specific enzyme components, surfactants and detergent builders, and the concentrations of which that can be used in the method, and the use a buffering system in the method.

24. Corbett teaches a method of applying a composition comprising at least one enzyme to a pest, wherein the enzyme is present in the composition from 0.1 to 5% by weight (p. 5, lines 17-24, p. 11, example 2). Corbett teaches that the composition may comprise a surfactant, such as an anionic surfactant, including many of those recited in the claims (p. 5, lines 14-16, p. 7, line 9-p. 8, line 13). Corbett teaches that the composition may comprise a detergent builder (e.g. silicates; p. 6, lines 13-19). Corbett teaches that the method comprises applying the composition to a surface (spreading) and allowing the pest to contact the surface (p. 11, example 2). Corbett teaches that the composition can comprise a hydrolase, a protease, or a lipase (p. 3, lines 18-24). Corbett teaches that the composition can be an aqueous solution or suspension (p. 5, line 25-p. 6, line 25). Corbett does not teach the specific concentration of detergents, soaps, and detergent builders in the composition. Corbett also does not teach the specific pH of the composition, or the use of a specific buffer.

25. At the time of the invention, a method for exterminating pests was known in the art, as taught by Corbett. Although Corbett does not teach the specific concentrations

of detergents, soaps, detergent builders or buffering components, as well as the specific pH, the selection of values within the claimed ranges would have been a matter of routine experimentation and optimization. The selection of the concentration of the soap, or detergent builder in the composition would be a matter of routine experimentation, particularly in the absence of evidence that the use of the claimed ranges would provide unexpected results. The selection of a known buffer to maintain the proper pH for enzyme action would also have been a matter of routine experimentation and optimization, because it is well known in the art that enzymes generally operate best within specific pH ranges. It would therefore have been obvious to one of ordinary skill in the art to use the teaching of Corbett to develop the claimed invention.

26. Claims 1, 3, 4, 8-49, 73 and 75-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbett (EP 0184288, cited in IDS) in view of Matsushita (Chem. Abstr. 119:88906x, cited in IDS) and Zoelde (Chem. Abstr. 109:185488a, cited in IDS). Claim 1 is drawn to a method for exterminating pests comprising the steps of providing a composition comprising an enzyme component, said enzyme component comprising at least one protease in an amount no more than 1% by weight of the composition and a detergent component; and applying the composition to at least one pest. The dependent claims recite methods of applying the composition, the use of a baiting substep, the concentration of the enzyme in the composition, the specific enzyme components, surfactants and detergent builders, and the concentrations of which that

can be used in the method, the use a buffering system in the method, and the use of fermentation products, particularly yeasts, in the method.

27. Corbett teaches a method of applying a composition comprising at least one enzyme to a pest, wherein the enzyme is present in the composition from 0.1 to 5% by weight (p. 5, lines 17-24, p. 11, example 2). Corbett teaches that the composition may comprise a surfactant, such as an anionic surfactant, including many of those recited in the claims (p. 5, lines 14-16, p. 7, line 9-p. 8, line 13). Corbett teaches that the composition may comprise a detergent builder (e.g. silicates; p. 6, lines 13-19). Corbett teaches that the method comprises applying the composition to a surface (spreading) and allowing the pest to contact the surface (p. 11, example 2). Corbett teaches that the composition can comprise a hydrolase, a protease, or a lipase (p. 3, lines 18-24). Corbett teaches that the composition can be an aqueous solution or suspension (p. 5, line 25-p. 6, line 25). Corbett does not specifically teach the use of an enzyme-containing fermentation product in the composition, particularly not a yeast fermentation product.

28. Each of Zoelde and Matsushita teach a yeast-containing insecticidal composition (see abstracts).

29. At the time of the invention, a method for exterminating pests using a composition comprising nearly all of the same elements was known, as taught by Corbett. It was further known that yeasts were a desirable component in an insecticidal composition. It is well known that it is *prima facie* obvious to combine two or more ingredients each of which is taught by the prior art to be useful for the same purpose in

order to form a third composition which is useful for the same purpose. See MPEP 2144.06. The use of the fermentation product with the claimed properties and within the claimed ranges would be a matter of routine experimentation and optimization, particularly in the absence of evidence showing unexpected results when using compositions with the claimed proportions of ingredients. Since the composition taught by Corbett was known to be an insecticidal composition comprising a biological component, one of ordinary skill in the art would have a reasonable expectation of success in using the fermentation products (yeasts) taught by Zoelde and Matsushita in the composition. It would therefore have been obvious to one of ordinary skill in the art to combine the teachings discussed above to arrive at the claimed invention.

30. Claims 1, 3, 4, 8-29, 39-59 and 75-77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbett (EP 0184288, cited in IDS) in view of Misato (US Pat. 3,873,700, cited in IDS). Claim 1 is drawn to a method for exterminating pests comprising the steps of providing a composition comprising an enzyme component, said enzyme component comprising at least one protease in an amount no more than 1% by weight of the composition and a detergent component; and applying the composition to at least one pest. The dependent claims recite methods of applying the composition, the use of a baiting substep, the concentration of the enzyme in the composition, the specific enzyme components, surfactants and detergent builders, and the concentrations of which that can be used in the method, the use a buffering system in

the method, and the use of compositions which comprise nitrogen sources, such as urea and ammonium sulfate, in the method.

31. Corbett teaches a method of applying a composition comprising at least one enzyme to a pest, wherein the enzyme is present in the composition from 0.1 to 5% by weight (p. 5, lines 17-24, p. 11, example 2). Corbett teaches that the composition may comprise a surfactant, such as an anionic surfactant, including many of those recited in the claims (p. 5, lines 14-16, p. 7, line 9-p. 8, line 13). Corbett teaches that the composition may comprise a detergent builder (e.g. silicates; p. 6, lines 13-19). Corbett teaches that the method comprises applying the composition to a surface (spreading) and allowing the pest to contact the surface (p. 11, example 2). Corbett teaches that the composition can comprise a hydrolase, a protease, or a lipase (p. 3, lines 18-24). Corbett teaches that the composition can be an aqueous solution or suspension (p. 5, line 25-p. 6, line 25). Corbett does not teach compositions which comprise nitrogen sources, such as urea and ammonium sulfate.

32. Misato teaches compositions for the protection of a plant from fungi or bacteria which may comprise pesticides and fertilizers, such as urea and ammonium sulfate (abstract, col. 3, lines 30-35). Misato also teaches that the compostions can comprise

33. At the time of the invention, a method for exterminating pests using a composition comprising nearly all of the same elements was known, as taught by Corbett. It was further known that it was desirable in the art to combine pesticides and fertilizers in the same composition, as taught by Misato. The use of the compositions in the claimed proportions would also have been a matter of routine optimization,

especially in the absence of unexpected results. One skilled in the art would therefore be motivated to combine the teachings discussed above to develop a composition comprising the claimed elements. One would have a reasonable expectation of success in combining these elements because it was known in the art that pesticides can be combined with fertilizers for agricultural purposes. It would therefore have been obvious to one of ordinary skill in the art to combine the teachings discussed above to arrive at the claimed invention.

34. Claims 1, 3, 4-29, 39-49, 60-63 and 75-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbett (EP 0184288, cited in IDS) in view of Price (US Pat. 4,587,123). Claim 1 is drawn to a method for exterminating pests comprising the steps of providing a composition comprising an enzyme component, said enzyme component comprising at least one protease in an amount no more than 1% by weight of the composition and a detergent component; and applying the composition to at least one pest. The dependent claims recite methods of applying the composition, the use of a baiting substep, the concentration of the enzyme in the composition, the specific enzyme components, surfactants and detergent builders, and the concentrations of which that can be used in the method, the use a buffering system in the method, and the use of oils, particularly biological extracts, in the method.

35. Corbett teaches a method of applying a composition comprising at least one enzyme to a pest, wherein the enzyme is present in the composition from 0.1 to 5% by weight (p. 5, lines 17-24; p. 11, example 2). Corbett teaches that the composition may

comprise a surfactant, such as an anionic surfactant, including many of those recited in the claims (p. 5, lines 14-16, p. 7, line 9-p. 8, line 13). Corbett teaches that the composition may comprise a detergent builder (e.g. silicates; p. 6, lines 13-19). Corbett teaches that the method comprises applying the composition to a surface (spreading) and allowing the pest to contact the surface (p. 11, example 2). Corbett teaches that the composition can comprise a hydrolase, a protease, or a lipase (p. 3, lines 18-24). Corbett teaches that the composition can be an aqueous solution or suspension (p. 5, line 25-p. 6, line 25). Corbett does not teach the use of oils, particularly the use of biological extracts, in the composition of the method.

36. Price teaches an insecticidal composition which comprises eucalyptus oil (abstract).

37. At the time of the invention, a method for exterminating pests using a composition comprising nearly all of the same elements was known, as taught by Corbett. It was further known in the art that eucalyptus oil could be used in insecticidal compositions, as taught by Price. The combination of the insecticidal compositions taught by Corbett with those taught by Price would be obvious to one of ordinary skill in the art because it is well known that it is *prima facie* obvious to combine two or more ingredient each of which is taught by the prior art to be useful for the same purpose in order to form a third composition which is useful for the same purpose. See MPEP 2144.06. The use of the compositions in the claimed proportions would also have been a matter of routine optimization, especially in the absence of unexpected results. One of ordinary skill in the art would have a reasonable expectation of success in combining

the teachings discussed above because both teachings are directed to the development of insecticides comprising natural ingredients. It would therefore have been obvious to one of ordinary skill in the art to combine the teachings discussed above to arrive at the claimed invention.

38. Claims 1, 3, 4-29, 39-49, 64-72 and 75-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Corbett (EP 0184288, cited in IDS) in view of Sakharova (US Pat. 4,826,682, cited in IDS). Claim 1 is drawn to a method for exterminating pests comprising the steps of providing a composition comprising an enzyme component, said enzyme component comprising at least one protease in an amount no more than 1% by weight of the composition and a detergent component; and applying the composition to at least one pest. The dependent claims recite methods of applying the composition, the use of a baiting substep, the concentration of the enzyme in the composition, the specific enzyme components, surfactants and detergent builders, and the concentrations of which that can be used in the method, the use a buffering system in the method, the use of a step for baiting the pest using the claimed attractants in the method, and the use of the composition in combination with other insecticides and aluminum compositions in the method.

39. Corbett teaches a method of applying a composition comprising at least one enzyme to a pest, wherein the enzyme is present in the composition from 0.1 to 5% by weight (p. 5, lines 17-24, p. 11, example 2). Corbett teaches that the composition may comprise a surfactant, such as an anionic surfactant, including many of those recited in

the claims (p. 5, lines 14-16, p. 7, line 9-p. 8, line 13). Corbett teaches that the composition may comprise a detergent builder (e.g. silicates; p. 6, lines 13-19). Corbett teaches that the method comprises applying the composition to a surface (spreading) and allowing the pest to contact the surface (p. 11, example 2). Corbett teaches that the composition can comprise a hydrolase, a protease, or a lipase (p. 3, lines 18-24). Corbett teaches that the composition can be an aqueous solution or suspension (p. 5, line 25-p. 6, line 25). Corbett does not teach the use of a step for baiting the pest using the claimed attractants or the use of the composition in combination with other insecticides and aluminum compositions.

40. Sakharova teaches a baiting composition, which may comprise sweet and sugary attractants, and which can incorporate insecticides (abstract). Sakharova teaches specific insecticides and aluminum compositions that can be incorporated into the mixture, such as aluminum compounds (including aluminum sulfate) and growth regulators (col. 2, lines 15-44).

41. At the time of the invention, a method for exterminating pests using a composition comprising nearly all of the same elements was known, as taught by Corbett. It was further known that attractants could be used in pest extermination methods, and that additional insecticides could be used to exterminate pests, as taught by Sakharova. One of ordinary skill in the art would have been motivated to combine these teachings because Sakharova teaches that the baiting compositions could be used with many insecticides (col. 2, lines 33-34). Further, the combination of the insecticidal compositions taught by Corbett with those taught by Sakharova would be

obvious to one of ordinary skill in the art. It is well known that it is *prima facie* obvious to combine two or more ingredient each of which is taught by the prior art to be useful for the same purpose in order to form a third composition which is useful for the same purpose. See MPEP 2144.06. One of ordinary skill in the art would have a reasonable expectation of success in combining the teachings discussed above because both teachings are directed to the development of insecticides comprising natural ingredients. It would therefore have been obvious to one of ordinary skill in the art to combine the teachings discussed above to arrive at the claimed invention.

42. Thus, the claimed invention as a whole was *prima facie* obvious over the combined teachings of the prior art.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheridan R. MacAuley whose telephone number is (571) 270-3056. The examiner can normally be reached on Mon-Thurs, 7:30AM-5:00PM EST, alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on (571) 272-0926. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SRM

/Ruth A Davis/
Primary Examiner, AU 1651